

# TEMPE POLICE DEPARTMENT: NORTH SUBSTATION, HEADQUARTERS RENOVATION, AND EQUINE FACILITY



1/3/2020

## Feasibility Study

Study of the Tempe Police Department North Substation, Headquarters Renovation, and Equine Facility needs and estimated project costs.

# Tempe Police Department: North Substation, Headquarters Renovation, and Equine Facility

## FEASIBILITY STUDY

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## EXECUTIVE SUMMARY

### Purpose

The Tempe Police Department provides professional police services to a community of about 180,000 residents. Additionally, Tempe is a major employment and educational center and the department services an estimated daily population of around 240,000 individuals. The Tempe police department focuses on deterring crime, enhancing the quality of work and life in the local community, and helping to make Tempe a community that continues to welcome a diverse family, student, and employment population. Tempe has limited facilities to operate out of, and as the community trends toward densification on its northern edges, those facilities are proving less strategically located. The Department must address the increased service demand and response-time demands as community development progresses.

The Tempe Facilities Master Plan (FMP) prepared by Makers in 2019 analyzed the City's existing facilities and departments along with future needs and developed a master plan to prioritize the necessary facility space needs over the coming years. As a city department, the Tempe Police Department was identified as having facilities in poor condition and poor functional usage. As a result of the FMP, the Police Department was suggested to relinquish usage of 10,000 square feet of space in the headquarters building to the courts for their use. Between vacating this space and planning for the growth and densification of the City, the Makers' FMP identified the need for a new substation and a new equine facility.

The purpose of this current study is to analyze the spatial needs and associated costs for a headquarters renovation, new north substation, and new equine facility at a higher level of detail than the previous FMP. This level of detail should be sufficient for budgeting capital improvement projects and creating a plan which would support the growth and strategic goals of the Police Department in the future.

### Philosophy

Tempe has unique department and facility needs compared to other local cities. Tempe sits as a major employment center; the Police Department serves a large number of people that are not residents of Tempe. Tempe is experiencing densification, which results in different needs than traditional suburban communities might have. Policing practices will also change over time as densification occurs. Tempe is also an active event City, hosting multiple large-scale events and supporting events at ASU. As ASU continues to develop and expand its facilities, the Tempe Police Department will need to change appropriately.

The identification of department needs that resulted from the Tempe Facilities Master Plan was a result of facility conditions and functional usage. This current study is focused on size and cost analysis for capital improvement planning. Limited analysis is included in determining specific division relocations within the departments, and allocation of personnel between existing and new facilities. The results provided herein establish solely future space needs and estimated costs.

### Current Issues

In the Tempe Facilities Master Plan and through the investigations of this study, the following issues were identified with the current Police facilities:

#### Police Headquarters

- Location works well for administration but is not effective for patrol coverage
- Conflict exists in a single lobby serving both Courts and Police

- Conflict in other shared spaces
- There is no ability to expand the groups that are currently housed here
- Courts needs more space
- Increased traffic in the area impacts effectiveness
- The aging Police/Courts Complex and constrained site not a good candidate for building expansion

#### Kiwanis Yard Equine Unit

- Structures in poor condition
- Facility is undersized
- Configuration negatively impacts both Public Works and Equine operations
- Location is not ideal for deployment to downtown

#### Kiwanis/Hawk Substation

- Facility is in poor condition and is undersized
- Facility has no public use, limited security

#### City Hall – Garden Level (bike unit)

- Undersized for current bike operations and unable to expand with services
- Space will be needed by other adjacent city departments

#### Other Issues

Lakeside and ASU development causing service demand growth and increased traffic intensity in north Tempe

## Recommendations

One of the main objectives of this study is to establish the spatial requirements of affected facilities. For the purposes of the study, the project is divided into the three main groupings.

- Headquarters Renovation
  - Department Administration, Bike Unit, and limited Investigative Operations
  - Renovate existing spaces to account for staff moves
  - Add a new lobby, West of courts space on 5<sup>th</sup>. Adds separate public entrance for Police services to the existing Headquarters, separating court and police program
  - Maintains jail to court circulation benefits
- New North Substation
  - Should be in the northern area of the city in order to address densification and calls for service growth, departmental presence, and community services
  - Space for Patrol, K-9, Gang Unit
  - Space for Investigations to move, as remaining space in HQ will not accommodate the entire group
  - Allows department to be flexible in accommodating future growth
- New Equine Facility
  - Appropriate facilities for the Mounted Unit to include the housing, care, training, and staging of the horses

The New Substation and Equine Facility could be placed on separate sites or co-located on a single larger property, if one exists.

The spatial needs are two part: Building Area and Site Area.

### Summary of Requirements

<u>GROUP</u>	<u>BUILDING AREA</u>	<u>SITE AREA</u>
Headquarters Renovation	11,723 sf	Existing
Lobby Expansion	1 500 sf	
New North Substation	44,215 sf	5.15 Acres
New Equine Facility	16,997 sf	3.67 Acres
<b>TOTALS</b>	<b>74,435 sf</b>	<b>8.82 Acres</b>

Project cost estimate are based on detailed program areas (measurable quantities) and general assumptions appropriate to the specific facility type. Pricing is based on current local market conditions which may change in future years. The project costs include appropriate soft costs and a design contingency to create a Total Project Budget. No land cost is included.

### Project Costs by Future Year

<u>GROUP</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>
Headquarters Renovation + Lobby Expansion	\$4.82	\$4.99	\$5.16	\$5.34	\$5.53	\$5.53	\$5.92
New North Substation	\$24.12	\$24.96	\$25.84	\$26.74	\$27.68	\$27.68	\$29.65
New Equine Facility	\$4.47	\$4.62	\$4.79	\$4.95	\$5.13	\$5.13	\$5.49
<b>TOTALS</b>	<b>\$33.41</b>	<b>\$34.58</b>	<b>\$35.79</b>	<b>\$37.05</b>	<b>\$38.34</b>	<b>\$38.34</b>	<b>\$41.07</b>

Costs are in Millions of Dollars

See ESTIMATE section and Appendix D & E for more detail.

End of Executive Summary

## METHODOLOGY AND PROJECT PROGRAM

Meetings were conducted with the Police Department staff at different levels who have a vested interest in the department's operations. The Executives and Command staff identified philosophies and priorities for the department. Commanders and Bureau Chiefs provided input for the future vision of the department.

The Department's organization was analyzed from both space needs and strategic working relationship levels, and spatial needs were exported. Based on the existing organization and the necessary relocation of department at the Garden Level and 10 W/Kiwanis, the Bike Unit, Mounted Unit, K9 Unit, and Gang Unit is displaced. Additionally, as part of the Makers Study, the Police Department needs to give approximately 11,000 square feet of the headquarters building to the Courts. In doing so, some of the units become separated. The operational strategy that has been infused to this program methodology is to keep all the investigation units in a single location. These units have critical working relationships; as such, the programs developed within this project assume keeping these units together.

This report developed a program outlining the needs for the future vision of the Department. It is presented as these three specific projects:

- Headquarters Renovation
- New Substation
- New Equine Facility

The program document details the space required for the departments in both building size and site needs, which is then rolled together into a cost estimate.

### Project Goals

The most important project goal is site location. Part of the department's current challenge is the location of the facilities. Facilities for police operations must be located strategically. Choosing an appropriate site will help the department's goal to ease traffic congestion downtown, improve officer response times, and create a more observable police presence in the community on the north side of Tempe Town Lake. Reducing the time and mileage required to move staff from stations to service areas will lower the carbon footprint of the Police Department.

Another important project goal for the future construction is sustainability. The new facility should be designed with its environmental impact in mind. Designing sustainable elements into the building benefits the users, the local community, the region, and beyond. The new substation must focus on the appropriate measures to include without impacting the operational needs of the facility.

Reducing water usage should be a main focus of the future design. Landscape irrigation is typically the largest single water use component of a facility such as this one. Reducing the amount of lawn and the number of trees, selecting native species for groundcover, plants, and trees that require little or no irrigation will significantly reduce the water demand. The new facility should be designed to minimize the number of fixtures. All fixtures should be low-flow to reduce their water use as much as possible.

Another sustainable design consideration is reduction of storm water runoff. Storm water runoff contributes to pollutants contaminating local soils and groundwater. Storm water runoff can be reduced by designing water retention areas into planted landscaping. Bio-swales that capture and slow the storm water, and naturally filter pollutants out of the runoff before it enters the ground or storm drain system are also important.

The new substation should be energy conscious. Strategies for reducing energy usage include east-west orientation, with the longest sides facing north-south. This strategy has no real cost association, but it can

significantly reduce the air conditioning and heating demands. Southern sun exposure needs to be controlled through some form of window treatment or shading device. By controlling the south glazing and maximizing the north glazing, natural daylight is able to enter building spaces which can reduce the need for artificial lighting and the associated electrical demand. Utilization of daylight sensors should be explored.

The building envelope should utilize lighter colored roofing to reflect heat and reduce cooling loads. Green roof incorporation should be explored as a strategy to provide quality outdoor space while reducing the cooling demands. High-performance glazing and insulation are extremely important and should be incorporated to enhance the performance of the building envelope.

The building should implement strategies for generating renewable power on site. Photovoltaic panels could be incorporated to produce solar energy and reduce the demand on the power system.

Additional sustainability strategies should be explored during the design phases, while evaluating the initial cost vs the life-cycle costs in order to determine the best value and mitigate the long-term building maintenance costs.

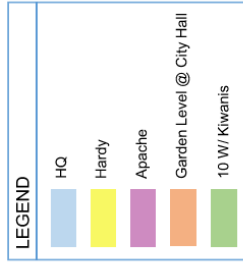
## Department Organization

The chart on the following page (page 7) shows the organization of the Tempe Police Department. The colors represent the current location of each unit.

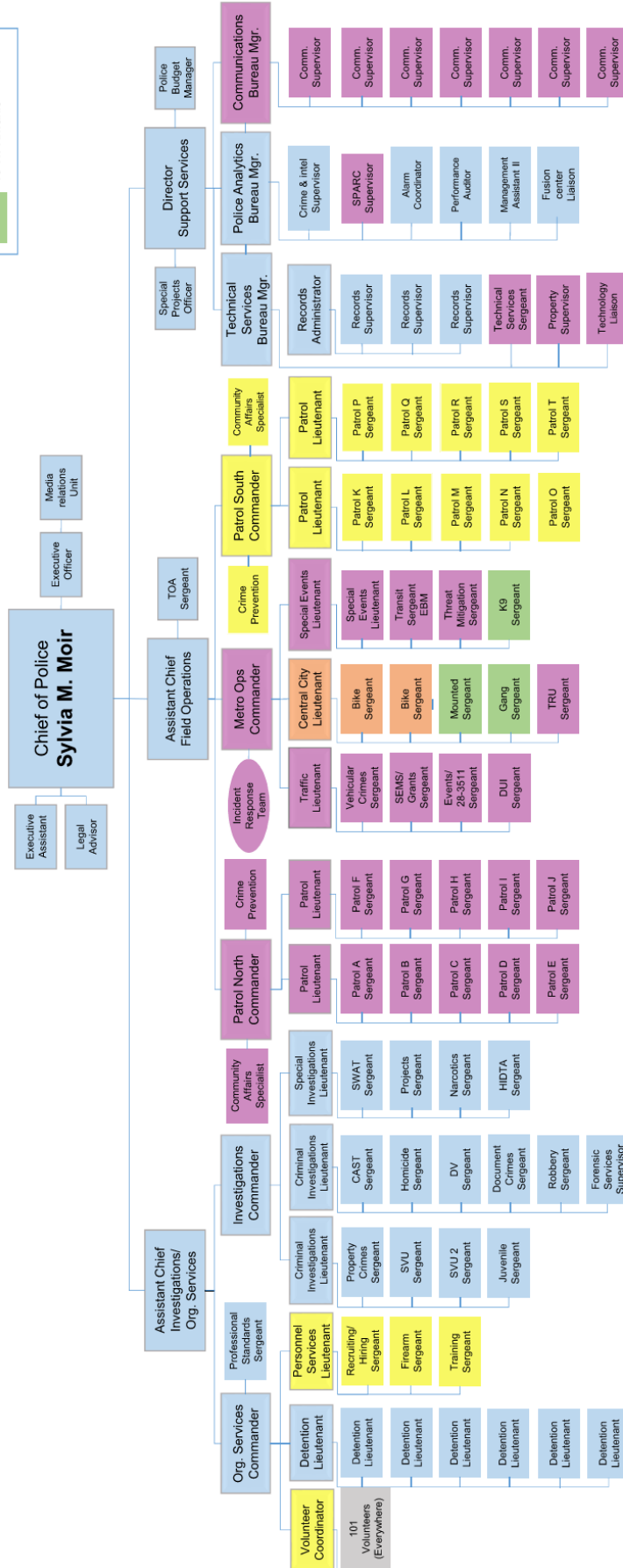
The Department generally operates from 3 locations: Headquarters (HQ), Hardy Substation, and Apache Substation. The two substations divide the city into two areas or districts: North and South. The remainder of the operations are housed at headquarters. As previously noted, the Bike Unit, Mounted Unit, K9 Unit, and Gang Unit are currently operating from other locations.

As the city continues to grow, the department has reached a stage where it is necessary to split patrol into three areas or districts. A great deal of development is occurring on the north side of Tempe Town Lake. This area is currently tough for the department to serve because access is limited. The Department believes it is strategically beneficial for call volume and access as well as community presence for a new substation to be built near to or north of the Lake.

The chart on Page 8 highlights the units that are proposed to be included in the new facilities or relocated to HQ during the renovation process. The new substation includes all of investigations, the Gang Unit, and 1/3 of Patrol. The new equine facility includes the Mounted Unit and the K9 Unit. The Bike Unit is relocated to the existing HQ during the renovation.

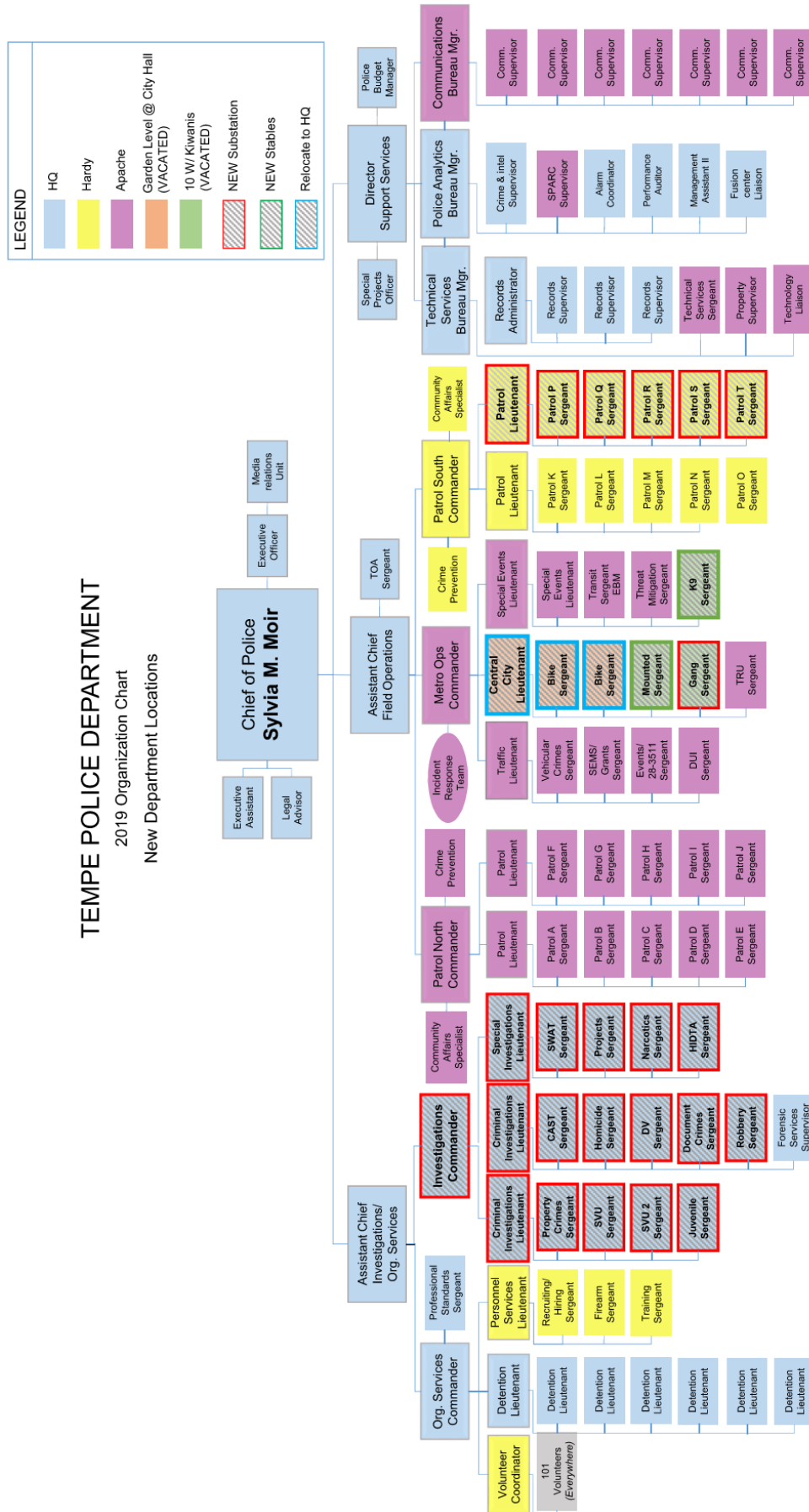


# TEMPE POLICE DEPARTMENT 2019 Organization Chart Current Department Locations



FY 19-20 Authorized Staffing	352
Sworn Staff	156.50
Professional Staff	508.50
Total Authorized	101
Volunteers	609.50
Total	

# TEMPE POLICE DEPARTMENT 2019 Organization Chart New Department Locations



FY 19-20 Authorized Staffing	
Sworn Staff	352
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Total Authorized	508.50
Volunteers	101
Total	609.50

## DEPARTMENT GROWTH PROJECTIONS

The United States Census Bureau produces population projections based on research and collected data. Over the next 40 years, the population of the United States is anticipated to increase to 399 million by the year 2050. The population is moving to more urban settings, leaving behind the suburbia lifestyle and desiring the convenience and lifestyle of a large downtown. This trend will likely result in the country's largest urban areas becoming more densified.

In order to establish a facility size, we must project the growth of the department over time. It is prudent to plan for at least 20 years of growth and try to predict those needs. This was analyzed in many ways and compared. Different trends were reviewed, including crime rates and population growth. Crime rates for property and non-violent crime continue to drop both locally and nationally.

It is important to note that this method of growth is with the assumption that today's work and policing methods are the constant. No adjustments have been made to attempt to predict what role technology, for example, might play in changing the workforce.

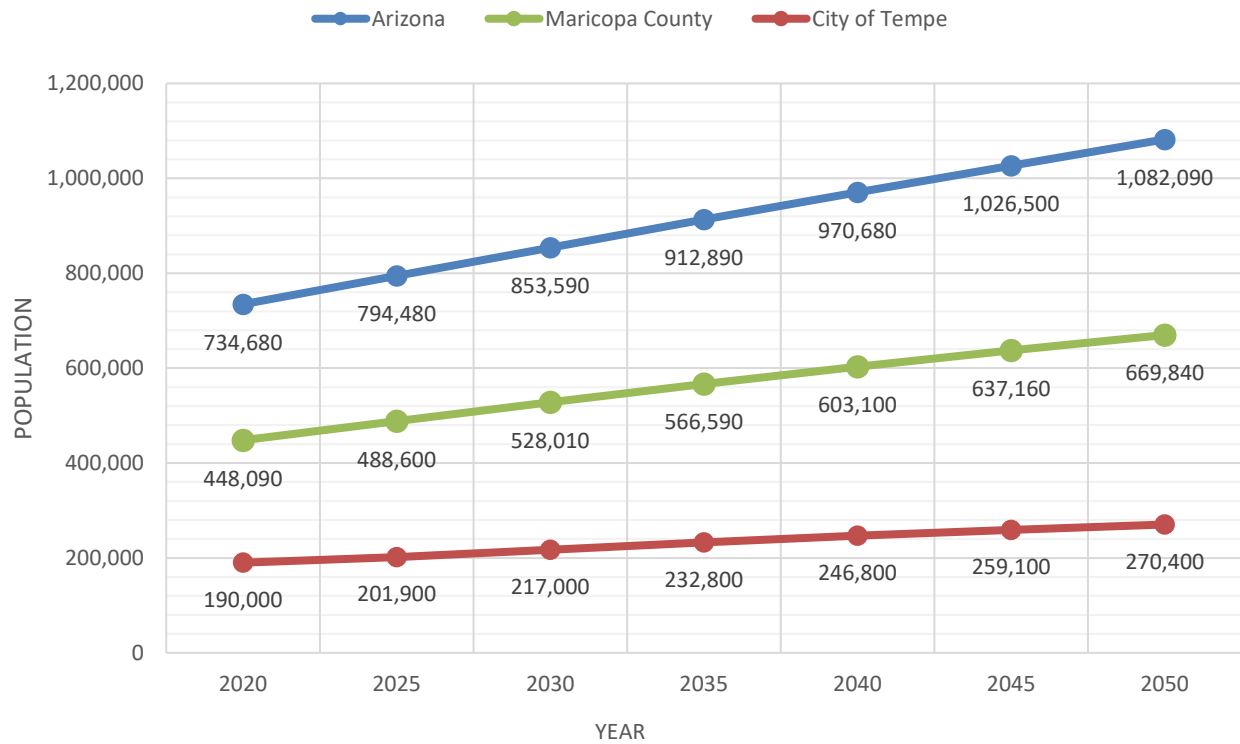
### Population and Crime

The population in Arizona is projected by the Arizona Department of Administration, Office of Employment & Population Statistics, through the year 2050. The projections shown below are broken into three metrics. The first is the growth projection for the state of Arizona as a whole. The state is expected to grow about 1.6% annually through 2050.

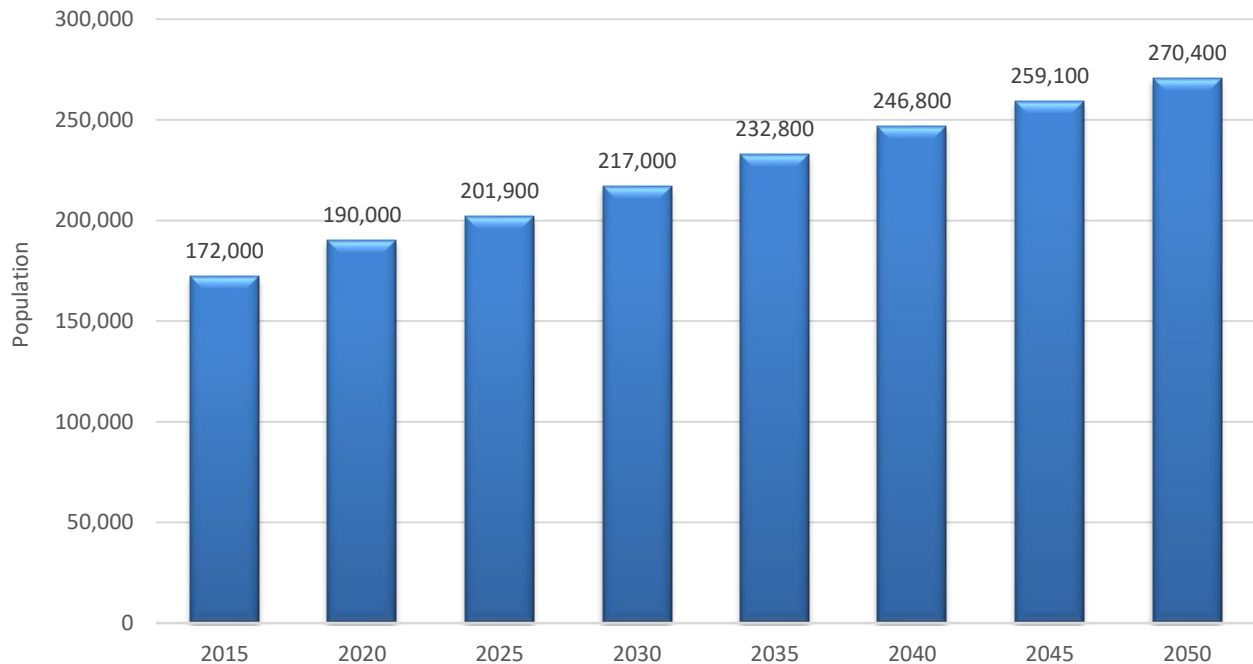
The second metric is the projection of population growth for Maricopa County. The county is expected to see growth of 1.7% annually through 2050. This is one of the top growth areas in the nation. According to the Arizona Department of Administration, the greater Phoenix Metro area (Maricopa County and Pinal County) account for 73% of the state's employment. The population growth of Maricopa County is directly impacted by Tempe's accelerated population growth and densification.

The final metric is the projection of the population growth for the City of Tempe. Much of the population of Tempe is attributed to ASU. Tempe has historically had a large employment demographic, and this is expected to accelerate in growth rate as the state and metropolitan area grows. The service population for the Police Department will continue to grow at a fast pace.

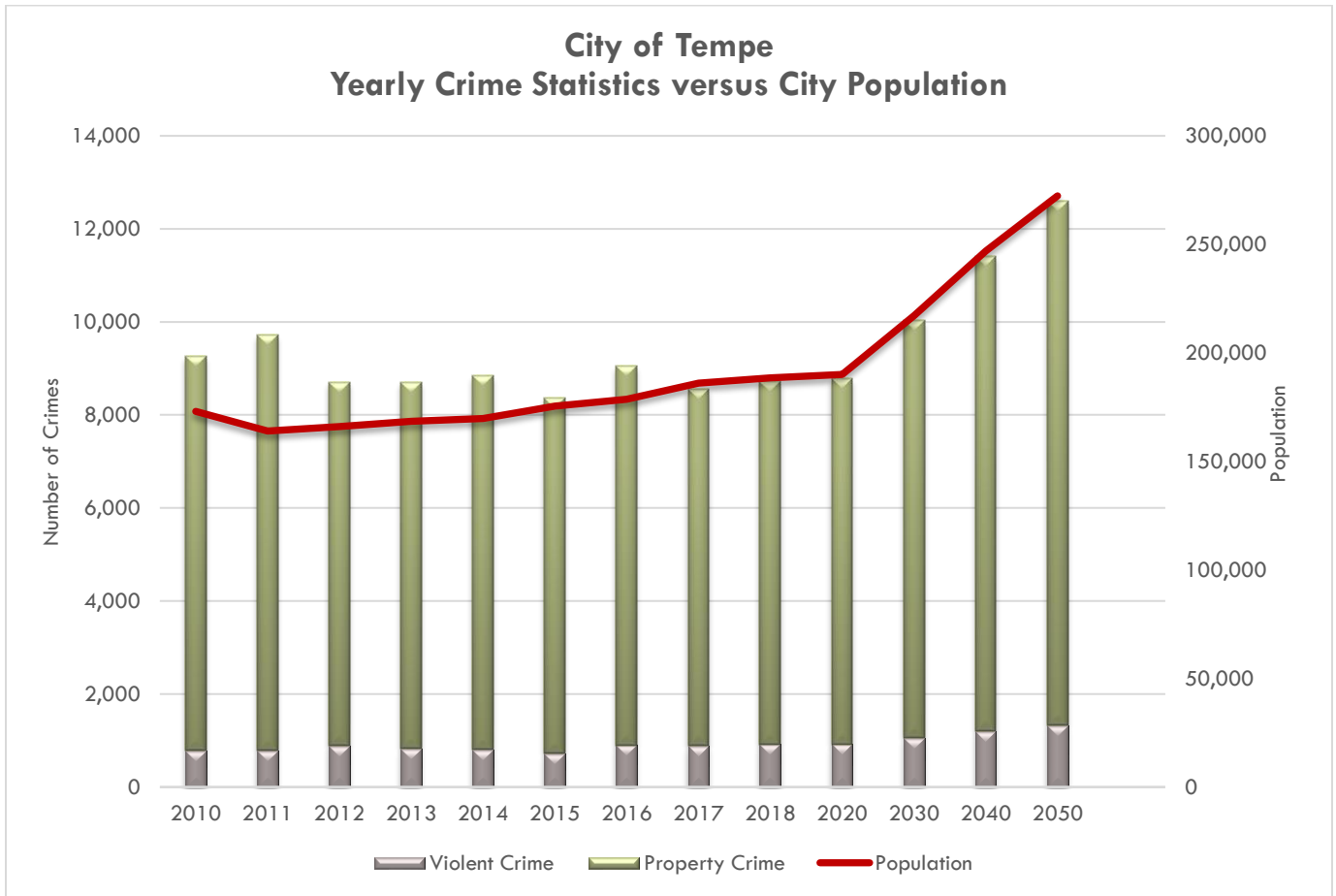
## Population Growth Chart



## City of Tempe Population Projections 2015-2050



The population of Tempe is projected to increase by over 42% over the next 30 years. From 2015 to 2020, the population increased by over 10%.



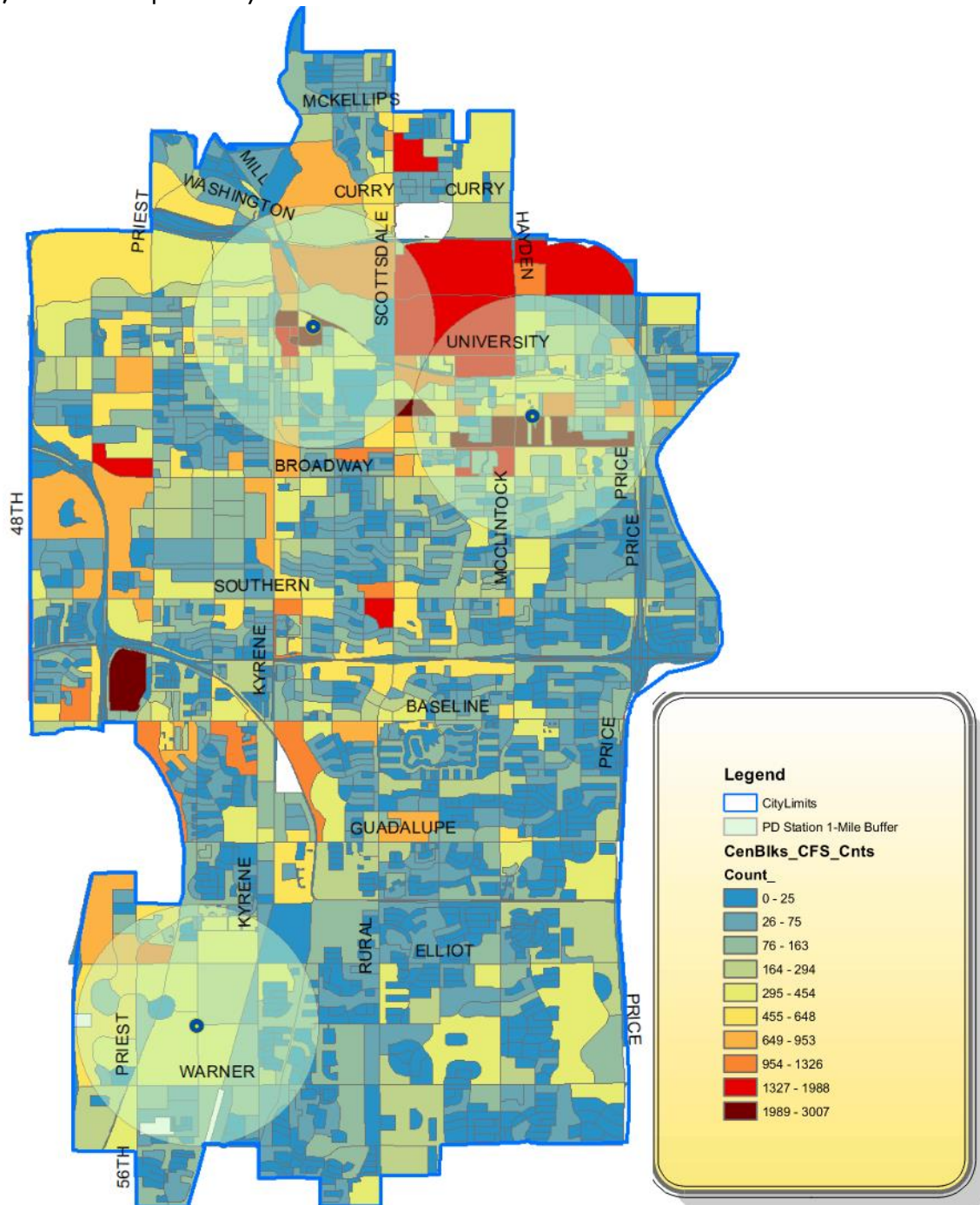
Crime rates are predicted to maintain their current relationship with the population, as there are no factors to indicate that crime would accelerate.

The program spreadsheets developed as a part of this report have articulated a 14% growth rate in terms of space through for 2025 to 2040. This is derived directly from these population growth studies.

## NEW NORTH SUBSTATION

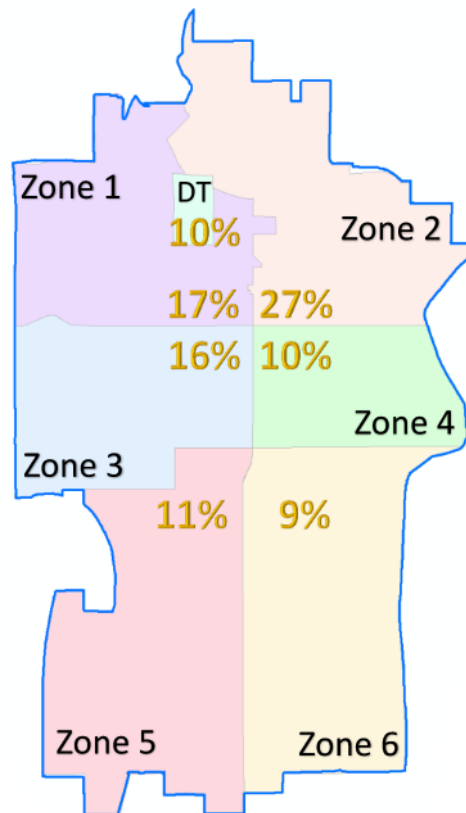
The new substation is needed to provide service and presence in the rapidly growing north Tempe area. Part of the space allocation for the new substation is for the investigations teams. Moving the investigations teams out of headquarters will free up the necessary space for the Courts.

The current breakdown of the calls for service have been mapped by census block, as can be seen in the graph below. The darker red areas in the northern area show current call volume is densifying as the area densifies, as discussed previously.



The substation size allocation includes patrol units, the Criminal Investigations Bureau, and the Special Investigations Bureau. Shared common use spaces are provided, such as conference rooms, interview rooms, fitness facilities and restrooms.

BY ZONE	2012	2013	2014	2015	2016	2017	2018	7-YR TOTAL
DOWNTOWN	11,493	12,894	13,325	14,048	13,534	13,108	12,012	90,414
	8.2%	9.3%	9.4%	10.4%	10.4%	9.9%	8.7%	9.5%
ZONE 1	34,893	23,535	23,312	21,553	19,377	20,797	22,330	165,797
	25.0%	16.9%	16.5%	15.9%	14.8%	15.7%	16.3%	17.3%
ZONE 2	28,478	41,085	41,675	37,579	37,075	36,586	38,905	261,383
	20.4%	29.5%	29.5%	27.8%	28.4%	27.7%	28.3%	27.4%
ZONE 3	29,739	20,699	20,503	19,861	19,782	20,635	21,978	153,197
	21.3%	14.9%	14.5%	14.7%	15.1%	15.6%	16.0%	16.0%
ZONE 4	22,986	10,857	11,725	11,664	11,860	11,545	11,791	92,428
	16.5%	7.8%	8.3%	8.6%	9.1%	8.7%	8.6%	9.7%
ZONE 5	6,840	16,863	17,265	16,850	16,506	16,860	17,791	108,975
	4.9%	12.1%	12.2%	12.5%	12.6%	12.7%	13.0%	11.4%
ZONE 6	5,213	13,272	13,470	13,655	12,514	12,748	12,573	83,445
	3.7%	9.5%	9.5%	10.1%	9.6%	9.6%	9.2%	8.7%
CITYWIDE	139,642	139,205	141,275	135,210	130,648	132,279	137,380	955,639
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
DOWNTOWN	8.2%	9.3%	9.4%	10.4%	10.4%	9.9%	8.7%	9.5%
NORTH	45.4%	46.4%	46.0%	43.7%	43.2%	43.4%	44.6%	44.7%
SOUTH	46.4%	44.3%	44.6%	45.9%	46.4%	46.7%	46.7%	45.9%



A major benefit to adding this substation in the north Tempe area is improved deployment and reduced “miles driven” cost in the rapidly growing community. This northern area would have a greater police community presence with a substation and regular patrol units with readily available access. Additionally, traffic

congestion would ease, as patrol units and resources would be better located for serving this developing area.

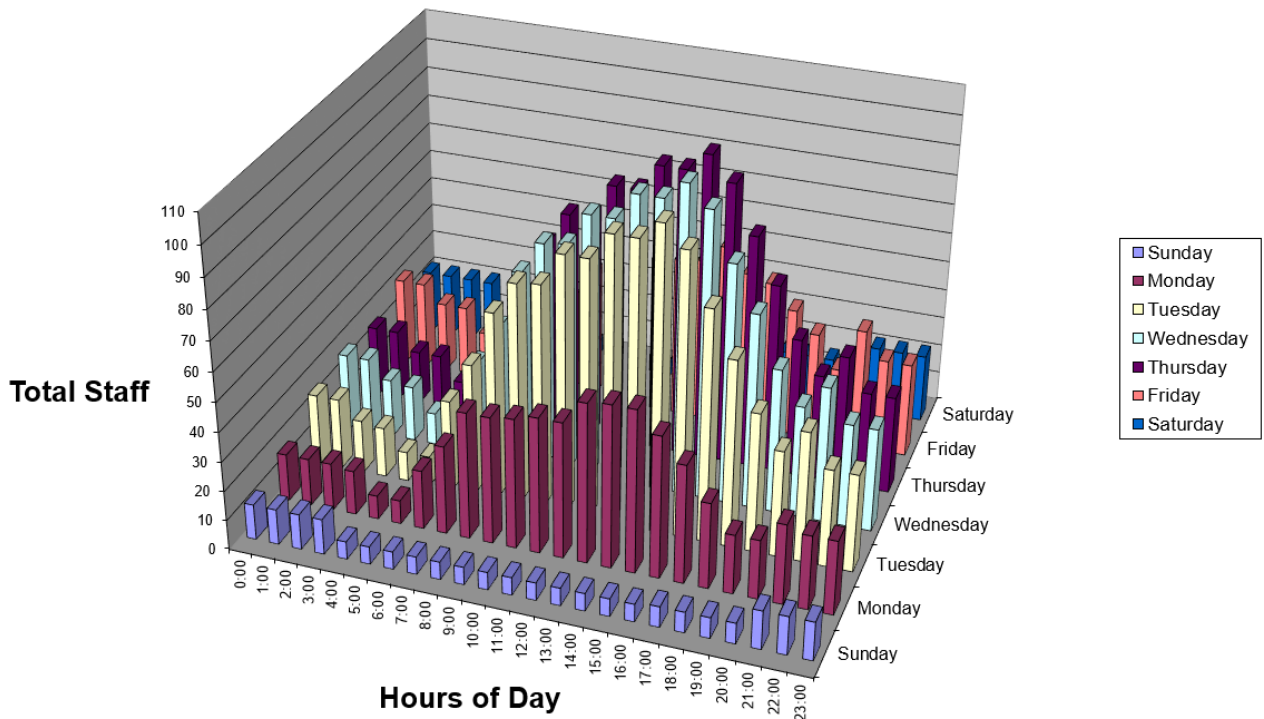
## Parking Analysis

This staffing analysis is used to identify the peak staffing level that might occur at this project site in order to plan for adequate parking space. The program is unique in combining shifts and operations. Some employees bring a personal vehicle to the site and take a city owned vehicle for their shift. This means that for these employees, the site must essentially accommodate two vehicles; however, patrol shifts overlap, so the parking space necessary is not simply determined by the number of staff allocated for the building.

### Substation Parking Analysis

TOTAL EMPLOYEES PER HOUR ENTIRE SUBSTATION		HOURS OF DAY																							
		0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
Days of the Week	Sunday	12	12	12	12	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	13	13	13
	Monday	16	16	16	15	8	8	20	30	43	43	44	46	46	54	55	55	48	40	29	20	20	27	25	25
	Tuesday	24	24	18	17	10	10	31	45	64	75	76	87	87	96	96	102	95	78	63	47	36	44	33	33
	Wednesday	26	26	20	19	11	11	32	46	66	77	78	89	89	98	98	104	97	81	66	49	38	46	35	35
	Thursday	24	24	18	18	10	10	31	45	65	76	77	88	88	97	97	103	95	79	64	47	36	44	33	33
	Friday	30	30	24	24	16	16	25	32	34	45	45	54	54	55	56	62	54	52	44	37	26	41	32	32
	Saturday	22	22	22	22	7	7	7	7	6	6	6	6	6	6	7	7	6	16	16	16	16	23	23	23

## Parking Analysis



The peak hour identified is 15:00 on Wednesday. There is a maximum of 104 staff on shift at this time. This number was used for the total staff parking space, and then 25 spaces were allocated for city owned patrol vehicles, and an additional 35 spaces for investigations vehicles. Other various specialty vehicle spaces were also provided for in the program.

## EXISTING HEADQUARTERS RENOVATION

The existing headquarters building is shared with the Courts.

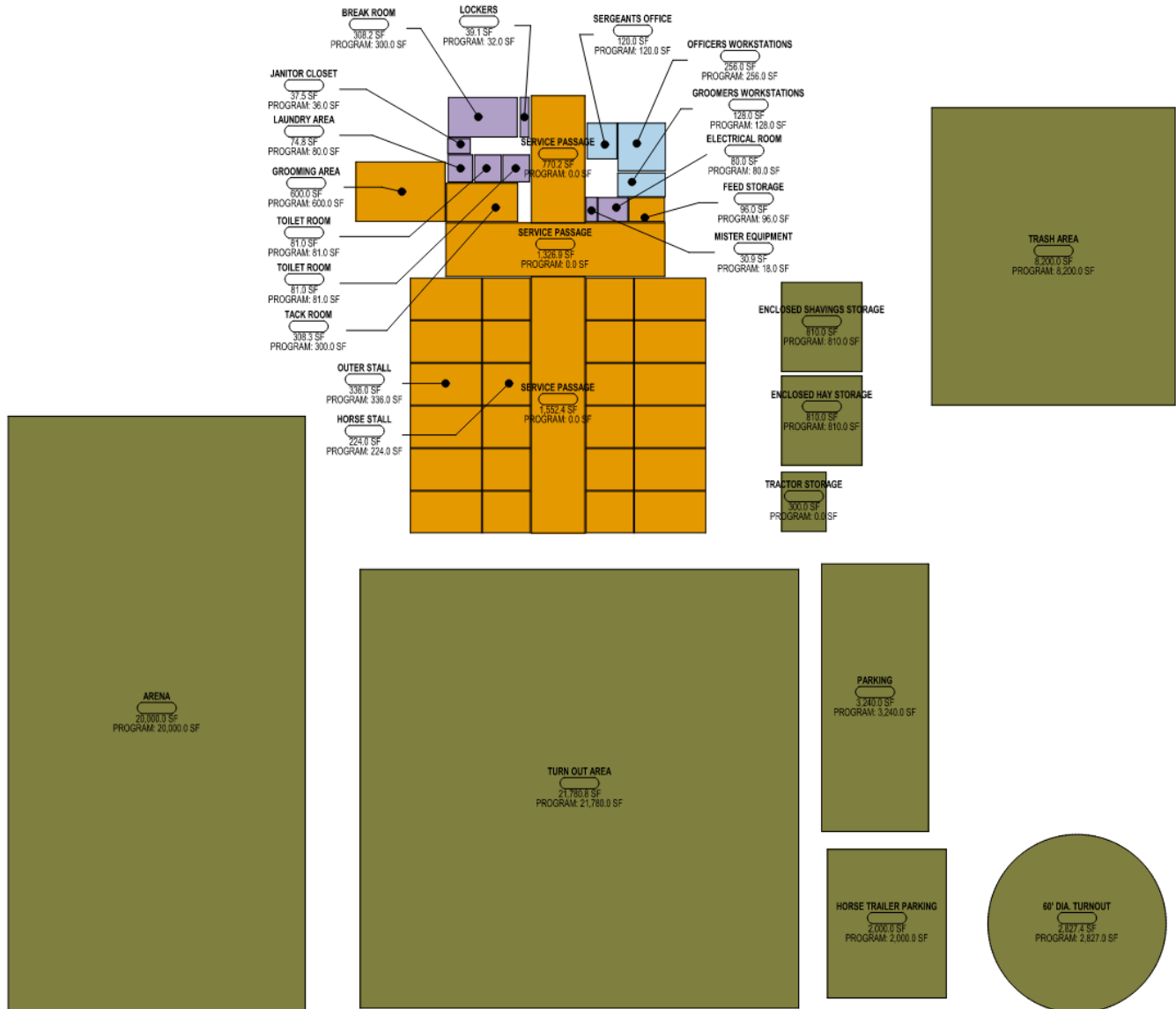
The diagram below shows the units and the space that those units currently utilize. These spaces are classified with individual codes that align with the program spreadsheet for departmental totals.

Police services in Building 2 on the first floor will be vacated by Police and allocated to the Courts for their expansion project. The space in Building 1 as shown in the diagram will remain allocated to the Police for their Headquarters operations. Additionally, the renovation includes adding a new public entrance and lobby, dedicated for Police services. The existing entry would then be dedicated to the Courts services.



The headquarters renovation also includes a moderate renovation of existing space in Building 1 to accommodate the bike unit which would relocate to the headquarters from the currently occupied garden level at city hall. Additional renovation costs include re-organizing the space to efficiently accommodate the consolidated units within Building 1 and its new lobby.

## NEW EQUINE FACILITY



The mounted unit currently shares a site and facilities with the City's Park Maintenance department. The existing facilities for the mounted unit are inadequate for the operations. The structure is in poor condition and is too small for the current size of the unit.

The current location of this unit is not ideal; This facility should be located near the downtown area. Relocating this unit and building to a new facility would significantly reduce or eliminate the need for trailering of the

horses to the patrol and event sites, reduce overall operating costs, and allow for better and more frequent utilization of the unit.

This new facility will also include the K9 unit. The K9 facility is in very poor condition and like the mounted unit is not located strategically for their operations and deployment. A more centralized location would benefit the department and the community.

## ESTIMATE

The budget estimate is built including cost for structures, site development cost (parking, landscape, retention, utilities), and furniture, fixtures, and equipment (FFE). Different areas of the projects have different construction costs per square foot associated with them. These are based on historical data.

Costs are escalated to allow for probable change in cost over time. The estimate reflects a November 2019 start date and is escalated annually for 6 years.

Assumptions used in the estimate:

1. Escalation of 3.5% per year.
2. Land cost is excluded.
3. Vacant land acquisition, there will be no existing structures on the site to abate or demolish.
4. Land will be suitable for construction, no adverse soil conditions which may require additional site preparation, or more expensive foundation systems.
5. Off-site utilities and improvements are not included; should any be required it will be an added cost to the project.

### Project Costs by Future Year

<u>GROUP</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>
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<b>TOTALS</b>	\$33.41	\$34.58	\$35.79	\$37.05	\$38.34	\$38.34	\$41.07

Costs are in Millions of Dollars

See Appendix D & E for more detail.

## APPENDIX

Appendix A - Program Spreadsheet

Appendix B - Existing HQ Program Floor Plans

Appendix C - Existing HQ Program Spreadsheets

Appendix D – Project Cost Estimate

Appendix E – Project Cost Estimate Escalation Summary

# Appendix A – Program Spreadsheets

The program spreadsheets on the following pages represent the anticipated needs of the department. The space needs were compiled through departmental interviews with various user groups based on anticipated staffing levels, bureau organizations, and future substation needs, including the equine unit and HQ renovation. The spreadsheets were developed for space needs as of the date of the report, and then escalated based upon the growth projections as explained in the report on Page 9.

Substation Units	
Patrol Division	9,365
CIB	12,207
SIB	6,350
Common Use Spaces	10,863

**Total Sq Ft** **38,785**

**Sq Ft with 14% Projected  
Department Growth  
through 2050**

**44,215** New Build, north of Lake

**Site Needs** **4.13 Acres**  
**Site Size Needed** **5.15 Acres**

**Equine & K9 Facility**

Stable Building 14,058  
K9 Area 852

**Total Sq Ft** **14,910**

**Sq Ft with 14% Projected  
Department Growth  
through 2050**

**16,997** New Build

**Site Needs** **3.28 Acres**  
**Site Size Needed** **3.67 Acres**

**HQ Renovation**

Vacated Space in Bldg 2  
(given to courts) 11,770 (NO renovation work for PD)  
CIB 2,677 (NO renovation work for PD)  
SIB 6,209 (NO renovation work for PD)  
New Lobby Space 1,500  
Vacated CIB Space (to new  
substation) 9,223  
Vacated SIB Space (to new  
substation) 0  
Renovate Bikes Space (from  
Garden Level) 2500

**Total Sq Ft to Renovate** **13,223** \*No growth factors included for renovation

**Sq Ft available in HQ after  
substation is built and SIB  
and CIB moved (future  
expansion/growth space)**

**10,723**

**CITY OF TEMPE  
NEW POLICE SUBSTATION  
PATROL DIVISION**

Name	Quantity	Size	Net Area	Comments
<b>Administration / Support</b>				
Assistant Chief of Police	1	12.5' x 18'	225	
Admin. Commander Office	1	12' x 12.5'	150	
Admin. Officer Office	1	10' x 12'	120	
Admin. Sergeant Office	1	10' x 12'	120	
Admin. Assistant Workstation	2	10' x 11'	220	
Service Assistant Workstation	2	8' x 8'	128	
Service Assistant Workstation Storage	1	1' x 1'	1	
Off Duty Coordinator	1	10' x 12'	120	
Copy / Printers / Shredder Bins Work Area	1	10' x 17'	170	
Records Room / Files	1	15.5' x 18'	279	
Patrol Conference Room	1	15' x 22'	330	
Off Duty Board Area	1	3.5' x 8'	28	
<b>Patrol</b>				
Bureau Commander Office	1	12' x 12.5'	150	
Patrol Sergeants Office (2 person shared)	3	12.5' x 20'	750	
Patrol Briefing Room	1	35' x 24'	840	
Patrol Work Area	1	21' x 14'	294	
Patrol Report Writing Cubicle	4	8' x 8'	256	
Patrol Equipment and Supplies	1	12' x 14.5'	174	
Patrol Mailboxes Area	1	5' x 13.5'	68	
Bulk Form / Paper Storage	1	8' x 10'	80	
Crime Analysis Unit	1	20' x 20'	400	
Juvenile Processing / Waiting	1	10' x 15'	150	
Interrogation Room	1	12' x 10'	120	
Interview Room	5	12.5' x 12'	750	
Decontamination Room	1	6' x 7'	42	
Monitor Room	1	10' x 20'	200	
Multipurpose Room (For 30 people)	1	30' x 35'	1,050	
<b>Subtotal:</b>			7,215	
<b>Circulation Gross Up:</b>		18%	1,299	
<b>Building Gross Up :</b>		10%	851	
<b>Total Building Gross Square Feet:</b>			<b>9,365</b>	

**CITY OF TEMPE  
NEW POLICE SUBSTATION  
CRIMINAL INVESTIGATIONS BUREAU**

<b>Name</b>	<b>Quantity</b>	<b>Size</b>	<b>Net Area</b>	<b>Comments</b>
<b>Administration / Support</b>				
Admin. Commander Office	1	12' x 12.5'	150	
Admin. Officer Office	1	10' x 12'	120	
Admin. Sergeant Office	1	10' x 12'	120	
Admin. Assistant Workstation	1	10' x 11'	110	
Service Assistant Workstation	1	8' x 8'	64	
Service Assistant Workstation Storage	1	1' x 1'	1	
Off Duty Coordinator	1	10' x 12'	120	
Copy / Printers / Shredder Bins Work Area	1	10' x 17'	170	
Evidence Area	1	20' x 25'	500	
Records Room / Files	1	15.5' x 18'	279	
Patrol Conference Room	1	15' x 22'	330	
Off Duty Board Area	1	3.5' x 8'	28	
Wire Tap w/Bathroom	1	20' x 30'	600	
Dog Kennel	2	5' x 8'	80	
Conference Room	2	12' x 20'	480	
Storage	1	20' x 30'	600	
<b>CAST</b>				
Sergeant	1	12' x 12.5'	150	
CAST Detective	5	8' x 8'	320	
Deputy US Marshal	1	8' x 8'	64	
USMTF	1	8' x 8'	64	
<b>HOMICIDE - MISSING PERSONS</b>				
Sergeant	1	12' x 12.5'	150	
Homicide Detective	5	8' x 8'	320	
DNA/Forensics Detective	1	8' x 8'	64	
<b>DV - NIGHT SQUAD</b>				
Sergeant	1	12' x 12.5'	150	
Night Squad	5	8' x 8'	320	
<b>DOCUMENT CRIMES/ARSON</b>				
Sergeant	1	12' x 12.5'	150	
Arson, DC	3	8' x 8'	192	
DC	1	8' x 8'	64	
<b>ROBBERY-AGG ASSAULTS</b>				
Sergeant	1	12' x 12.5'	150	
Robbery Detective	5	8' x 8'	320	
<b>AUTO/PAWN/PROPERTY CRIMES</b>				
Sergeant	1	12' x 12.5'	150	
Auto Theft	2	8' x 8'	128	
Metal	2	8' x 8'	128	
Arson	2	8' x 8'	128	
Pawn	1	8' x 8'	64	
<b>SPECIAL VICTIMS UNIT</b>				
Sergeant	1	12' x 12.5'	150	
1, DT	1	8' x 8'	64	
6	1	8' x 8'	64	
4	1	8' x 8'	64	

Cold Cases	2	8' x 8'	128
3	2	8' x 8'	128
5	1	8' x 8'	64
Victim Advocate	1	8' x 8'	64
<b>SVU 2</b>			
Sergeant	1	12' x 12.5'	150
Computer Forensic	2	8' x 8'	128
Dispo/Admin Officer	1	8' x 8'	64
Internet Crimes Against Children	2	8' x 8'	128
Sex Offender Notific	1	8' x 8'	64
Child Abuse/Neglect	1	8' x 8'	64
<b>Juvenile Unit</b>			
Sergeant	1	12' x 12.5'	150
Officer	9	8' x 8'	576
<b>Subtotal:</b>			8,878
<b>Circulation Gross Up:</b>		<b>25%</b>	2,220
<b>Building Gross Up :</b>		<b>10%</b>	1,110
<b>Total Building Gross Square Feet:</b>			<b>12,207</b>

**CITY OF TEMPE**  
**NEW POLICE SUBSTATION**  
**SPECIAL INVESTIGATIONS BUREAU**

Name	Quantity	Size	Net Area	Comments
<b>Administration / Support</b>				
Admin. Commander Office	1	12' x 12.5'	150	
Admin. Officer Office	1	10' x 12'	120	
Admin. Sergeant Office	1	10' x 12'	120	
Admin. Assistant Workstation	1	10' x 11'	110	
Service Assistant Workstation	1	8' x 8'	64	
Service Assistant Workstation Storage	1	1' x 1'	1	
Off Duty Coordinator	1	10' x 12'	120	
Copy / Printers / Shredder Bins Work Area	1	10' x 17'	170	
Records Room / Files	1	15.5' x 18'	279	
Patrol Conference Room	1	15' x 22'	330	
Off Duty Board Area	1	3.5' x 8'	28	
EOD explosives	1	10' x 20'	200	
Impound Area	1	12' x 20'	240	
Storage	1	20' x 30'	600	
Server Room	1	15' x 10'	150	
Dog Kennel	3	5' x 8'	120	
<b>TACTICAL UNIT (SWAT, TST, EOD)</b>				
Sergeant	1	12' x 12.5'	150	
EOD Detective	2	8' x 8'	128	
<b>PROJECTS UNIT</b>				
Sergeant	1	12' x 12.5'	150	
SWAT - T	1	8' x 8'	64	
SWAT	4	8' x 8'	256	
SWAT/DEA	1	8' x 8'	64	
NARC, SP/DEA	1	8' x 8'	64	
US MARSHALL	1	8' x 8'	64	
SWAT, K9/DEA	1	8' x 8'	64	
TECH INVEST.	1	8' x 8'	64	
<b>H.I.T.D.A.</b>				
Sergeant	1	12' x 12.5'	150	
<b>NARCOTICS UNIT</b>				
Sergeant	1	12' x 12.5'	150	
Vacant	1	8' x 8'	64	
NARC, T	1	8' x 8'	64	
NARC, CNT	2	8' x 8'	128	
NARC	1	8' x 8'	64	
NARC, K9, T, HM	1	8' x 8'	64	
ASSET FORF.	1	8' x 8'	64	
<b>Subtotal:</b>				
			4,618	
<b>Circulation Gross Up:</b>				
		25%	1,155	
<b>Building Gross Up :</b>				
		10%	577	
<b>Total Building Gross Square Feet:</b>				
			<b>6,350</b>	

**CITY OF TEMPE**  
**NEW POLICE SUBSTATION**  
**GENERAL / COMMON USE SPACES**

[illegible]

**CITY OF TEMPE  
NEW POLICE SUBSTATION  
SITE SPACES**

Name	Quantity	Size	Net Area	Circulation Factor		Total Net Sq. Ft.	Comments
<b>Parking</b>							
Staff/Employee Parking Spaces	105	10' x 20'	21,000	100%	21000	42,000	
Patrol Vehicles Parking Spaces	25	12' x 20'	6,000	100%	6000	12,000	
Public Parking Spaces	30	10' x 20'	6,000	100%	6000	12,000	
Investigations Vehicles	35	10' x 20'	7,000	100%	7000	14,000	
Specialty Vehicles	5	12' x 20'	1,200	100%	1200	2,400	
Mobile Command Vehicle Staging Area	1	15' x 50'	750	100%	750	1,500	
DUI Van / RV Parking (Non-Use)	1	15' x 50'	750	100%	750	1,500	
Future Large Vehicle Parking	1	15' x 50'	750	100%	750	1,500	
Light Vehicle Maintenance / Supplies Storage	1	24' x 40'	960	100%	960	1,920	
Biohazard Parking	1	12' x 20'	240	100%	240	480	
Downed Vehicle Parking	2	12' x 20'	480	100%	480	960	
Service Assist Truck Parking	2	12' x 20'	480	100%	480	960	
<b>Common Use Spaces</b>							
Public Bike Rack	1	7' x 12'	84	0%	0	84	
Pistol Locker Area	1	5' x 5'	25	0%	0	25	
Hard Surface Area	1	50' x 100'	5,000	0%	0	5,000	
Grass Area	1	50' x 50'	2,500	0%	0	2,500	
<b>Subtotal:</b>			53,219				
<b>Circulation Gross Up:</b>		<b>100%</b>	<b>53,219</b>				
<b>Total Gross Square Feet Programmed:</b>			<b>106,438</b> sq ft			2.44 Acres	
<b>Landscape Area</b>							
			<b>0.5</b> Acres				
<b>Water Retention Needs</b>							
			<b>0.5</b> Acres				
<b>Total Acreage Recommended</b>							
			<b>3.44</b> Acres				
<b>Total Acreage for "Ideal" Site</b>							
		20%	<b>4.13</b> Acres				
<b>COMMENTS</b>							

**CITY OF TEMPE**  
**Equine & K9 Facility**

Department	Space Name	Quantity	Size	Net Area Sq Ft	Comments
<b>Stable Building</b>					
Office	Sergeants Office	1	12' x 10'	120	
Office	Officers Workstation	4	8' x 8'	256	
Office	Groomers Workstation	2	8' x 8'	128	
Support	Break Room	1	15' x 20'	300	
Support	Toilet Room - Single	2	9' x 9'	162	
Support	Lockers	8	2' x 2'	32	
Support	Mister Equipment	1	3' x 6'	18	
Support	Laundry Area	1	10' x 8'	80	
Support	Janitorial Closet	1	6' x 6'	36	
Support	Electrical Room	1	8' x 10'	80	
Horse Area	Tack Room	1	12' x 25'	300	
Horse Area	Feed Storage	1	8' x 12'	96	
Horse Area	Horse Stall	12	14' x 16'	2,688	
Horse Area	Outer Stall	12	14' x 24'	4,032	
Horse Area	Service Passage	1	18' x 202'	3,636	
Horse Area	Grooming Area	1	20' x 30'	600	
<b>Subtotal</b>				12,564	
<b>K9 Unit</b>					
Office	Sergeants Office	1	12' x 10'	120	
Office	Officers Workstation	5	8' x 8'	320	
Dog Area	Dog Kennels	8	6' x 5'	240	
Dog Area	Dog Wash	1	6' x 5'	30	
<b>Subtotal:</b>				710	
<b>Total:</b>				13,274	
<b>Circulation Gross Up:</b>				18%	2,389
<b>Building Gross Up :</b>				10%	1,566
<b>Total Building Gross Square Feet:</b>					<b>17,230</b>
Site	Parking Spaces	20	9' x 18'	3,240	
Site	Bike Rack	1	4' x 6'	24	
Site	Horse Trailer Parking	5	10' x 40'	2,000	
Site	Turn Out Area - 1/2 Acre	1		21,780	
Site	Obstacle Course (included in Arena)	1			
Site	Arena w/ built in ramps (Standard Competition size)	1	100' x 200'	20,000	
Site	Enclosed Hay Storage	1	27' x 30'	810	
Site	Enclosed Shavings Storage	1	27' x 30'	810	
Site	Dog Run	1	40' x 20'	800	
Site	Trash Area (30 bins)	1		500	
Site	Tractor Storage	1	10' x 10'	100	
<b>Subtotal Building:</b>				17,230	
<b>Subtotal Site:</b>				58,320	
<b>Total:</b>				75,550	
				1.73 Acres	
<b>Landscape Area</b>				<b>0.5 Acres</b>	
<b>Water Retention Needs</b>				<b>0.5 Acres</b>	
<b>Total Acreage Recommended</b>				<b>2.73 Acres</b>	
<b>Total Acreage for "Ideal" Site</b>		20%	<b>3.28</b>		

CITY OF TEMPE POLICE DEPARTMENT				
Headquarters				
BUILDING SPACES CURRENTLY OCCUPIED - BY DEPARTMENT				
BUREAU	Building 1	Building 2	Lobby	
<b>CRIMINAL INVESTIGATIONS BUREAU</b>				
Basement CIB-1	4,207	0		
1st Floor CIB-2	4,406	0		
1st Floor CIB-3	215	0		
1st Floor CIB-4	395	0		
1st Floor CIB-5	0	1,235		
1st Floor CIB-6	0	1,039		
1st Floor CIB-7	0	403		
TOTAL	9,223	2,677		11,900 TOTAL CIB S.F.
<b>SPECIAL INVESTIGATIONS BUREAU</b>				
1st Floor SIB-1	0	5,765		
1st Floor SIB-2	0	444		
TOTAL	0	6,209		6,209 TOTAL SIB S.F.
<b>CRIMINAL INTELLIGENCE CENTER</b>				
1st Floor CIC-1	2,390	0		
1st Floor CIC-2	518	0		
TOTAL	2,908	0		2,908 TOTAL CIC S.F.
<b>ADMINISTRATION SERVICES</b>				
1st Floor AD-1	0	0	724	
2nd Floor AD-2	5,312	0		
TOTAL	5,312	0	724	6,036 TOTAL AD S.F.
<b>FORENSICS</b>				
Basement F-1	2,213	0		
1st Floor F-2	0	683		
TOTAL	2,213	683		2,896 TOTAL FORENSICS S.F.
<b>RECORDS</b>				
1st Floor R-1	147	0		
1st Floor R-2	217	0		
2nd Floor R-3	4,154	0		
TOTAL	4,518	0		4,518 TOTAL RECORDS S.F.
<b>IT</b>				
2nd Floor IT-1	0	9,875		
TOTAL	0	9,875		9,875 TOTAL IT S.F.
<b>SERVICES</b>				
Basement S-1	2,856	0		
Basement S-2	715	0		
1st Floor S-3	366	0		
1st Floor S-4	672	0		
1st Floor S-5	132	0		
1st Floor S-6	0	232		
1st Floor S-7	0	805		
1st Floor S-8	0	271		
1st Floor S-9	0	893		
2nd Floor S-10	362	0		
2nd Floor S-11	693	0		
TOTAL	5,796	2,201		7,997 TOTAL SERVICES S.F.
<b>JAIL</b>				
Basement Jail	0	5,821		
TOTAL	0	5,821		5,821 TOTAL JAIL S.F.
<b>GENERAL</b>				
Basement G-1 FITNESS	625	0		
Basement G-2	0	725		
TOTAL	625	725		1,350 TOTAL GENERAL S.F.
<b>GRAND TOTALS</b>	<b>30,595</b>	<b>28,191</b>	<b>724</b>	<b>59,510</b>

# Appendix B – Existing HQ Program Floor Plans

The existing program floor plans represent the program currently occupying the headquarters building. The spaces were color coded by department and reference to the spreadsheet and enlarged diagrams contained in Appendix C. These diagrams visualize the spaces that will need to be relocated to accommodate the Courts expansion project.



**FIG A-1 | EXISTING PROGRAM AREA PLAN - BASEMENT**





**FIG A-2 | EXISTING PROGRAM AREA PLAN - FIRST FLOOR**





**FIG A-3 | EXISTING PROGRAM AREA PLAN - SECOND FLOOR**



# Appendix C – Existing HQ Program Spreadsheets

The existing program spreadsheets take the spaces as identified in Appendix B and break them out into rooms, offices, and spatial needs as currently exist. These spreadsheets identify the displaced spaces that the department needs to relocate for the Court expansion. No growth factors are built into this program.

**CITY OF TEMPE POLICE DEPARTMENT**
**Headquarters**
**BUILDING SPACES CURRENTLY OCCUPIED - 1st Floor Building 1**

Space Code	Department	Space Name	Quantity	Size	Net Area Sq Ft	Comments
	CIB	Break Room	1		384	
	CIB	Open Office Workstations	16	6'x8'	768	a
	CIB	Open Office Files and Circulation			765	
	CIB	Private Office	1		290	
	CIB	Private Office 140 s.f. each	3		420	
	CIB	Private Office 120 s.f. each	6		720	
	CIB	CIB Commander Office	1		200	
	CIB	Administration Workstation	1	7'x8'	56	
	CIB	Administration Files and Circulation	1		325	
	CIB	Evidence/Copy Room	1		510	
	CIB	Conference Room	1		390	
	CIB	Quiet Room	1		140	
	CIC	Private Office 120 s.f. each	4		480	
	CIC	Open Office Workstations	13	6'x8'	624	b
	CIC	Open Office Files and Circulation			564	
	CIC	Private Office	1		112	
	CIC	Conference Room	1		905	
	CIC	Shared Office (3 workstations)	1		372	
	R-2	Records Administrator Office	1		213	

**Subtotal:** 8,238

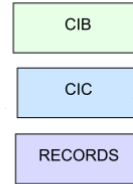
EMPLOYEE COUNT: 50

TOTAL FLOOR AREA (MINUS STAIR 1135) 10,800

**COMMENTS**

a - Additional 256 s.f. needed for (16) 8'x8' workstations

b - Additional 208 s.f. needed for (13) 8'x8' workstations



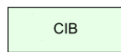
NORTH

# 1ST FLOOR-BUILDING 1



**CITY OF TEMPE POLICE DEPARTMENT**
**Headquarters**
**BUILDING SPACES TO RELOCATE - 1st Floor Building 2**

Space Code	Department	Space Name	Quantity	Size	Net Area Sq Ft	Comments
<b>1ST FLOOR - BUILDING 2</b>						
SIB		Evidence Processing	1		524	
SIB		Private Office	1		171	
SIB		Private Office	1		152	
SIB		Private Office	1		132	
SIB		Private Office	1		152	
SIB		Private Office	1		120	
SIB		Private Office	1		130	
SIB		Open Office Workstations	18	6'x8'	864	a
SIB		Open Office Files and Circulation			1,207	
SIB		Briefing/Training Room	1		670	
SIB		File Storage Room	1		200	
SIB		Data Analysis Center	1		345	
SIB		Break Room and Seating Area	1		205	
SIB		Copy/Print Room	1		206	
SIB		Admin Office	1		112	
SIB		EOD Workshop	1		318	
SIB		TECH INV Workshop	1		274	
SIB		Data Center Office	1		251	
SIB		Server Room	1		85	
SIB		Storage Room	1		444	
CIB		Computer Forensics Cyber Crime	1		647	
CIB		Open Office Workstations (5 + 3 Future)	8	6'x8'	384	b
CIB		Open Office Files and Circulation			675	
CIB		Private Office	1		174	
CIB		Private Office	1		128	
CIB		Conference Room	1		198	
CIB		Large Interview Area	1		772	
CIB		Monitor Room	1		125	
CIB		Interview Room	1		100	
CIB		Interview Room	1		77	
CIB		Interview Room	1		74	
AD-1		PD Reception	1		280	
AD-1		Lobby	1		189	
AD-1		Vestibule	1		230	
AD-1		Fingerprinting	1		190	
AD-1		Work Area	1		190	
<b>Total Area to Relocate:</b>					<u>10,995</u>	
EMPLOYEE COUNT TO RELOCATE: 50						
<b>COMMENTS</b>						
a - Additional 288 s.f. needed (18) 8'x8' workstations						
b - Additional 128 s.f. needed for (8) 8'x8' workstations						



## 1ST FLOOR BUILDING 2

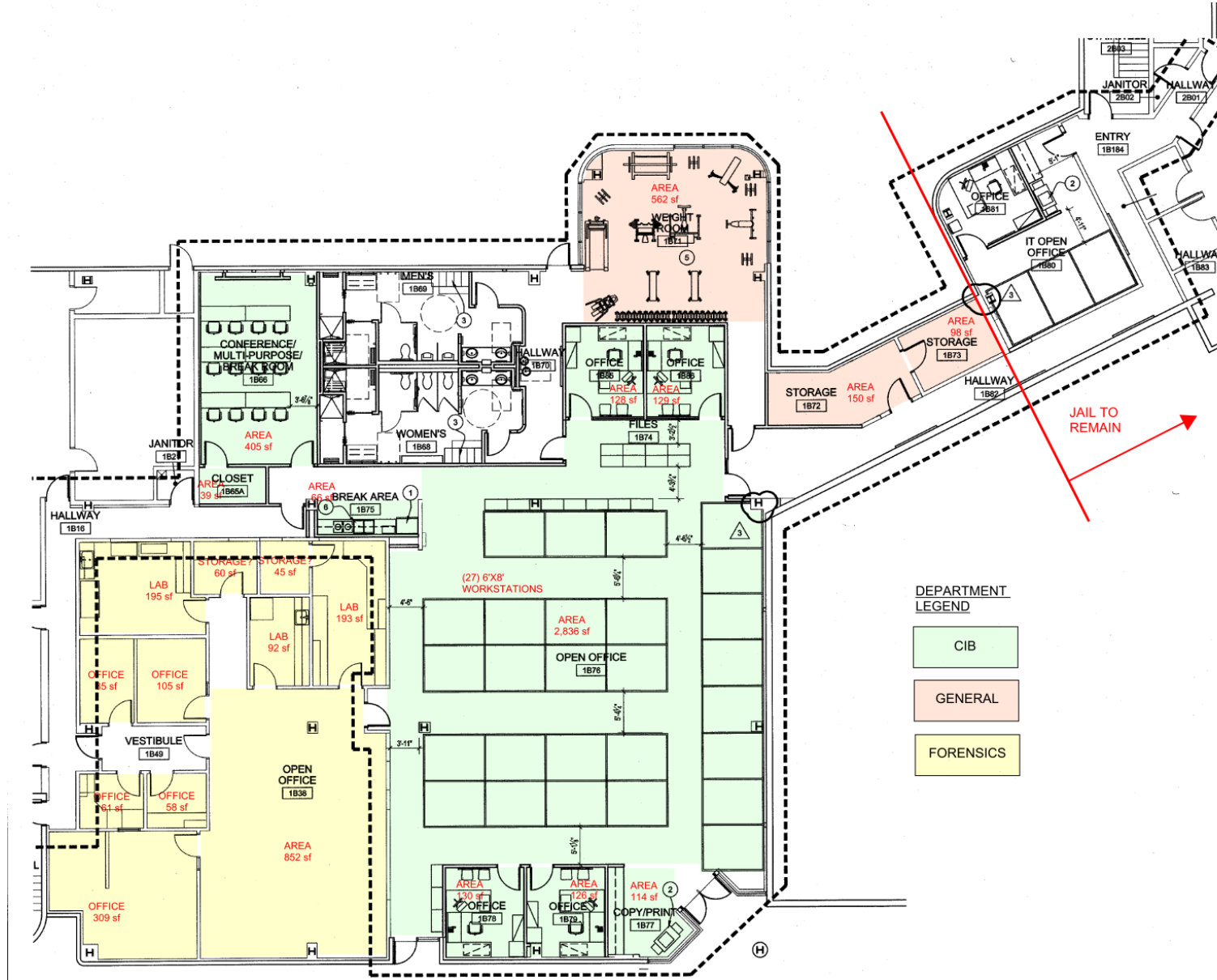


**CITY OF TEMPE POLICE DEPARTMENT**

Headquarters

**BUILDING SPACES CURRENTLY OCCUPIED - Basement Building 1**

Space Code	Department	Space Name	Quantity	Size	Net Area Sq Ft	Comments
CIB		Break Area	1		66	
CIB		Open Office Workstations	27	6'x8'	1,296	a
CIB		Open Office Files and Circulation			1,540	
CIB		Private Office	1		128	
CIB		Private Office	1		128	
CIB		Private Office	1		130	
CIB		Private Office	1		125	
CIB		Conference Room	1		405	
CIB		Conference Room Closet	1		40	
CIB		Copy/Printer Area	1		114	
FSU		Open Office Workstations	7	6'X8'	336	b
FSU		Open Office Files and Circulation			516	
FSU		Laboratory	1		193	
FSU		Laboratory Storage	1		45	
FSU		Laboratory	1		92	
FSU		Laboratory	1		195	
FSU		Storage	1		60	
FSU		Office	1		105	
FSU		Office	1		85	
FSU		Office	1		58	
FSU		Office	1		61	
GEN		Weight Room	1		560	
GEN		Storage	1		150	
GEN		Storage	1		98	
<b>Total Gross Square Feet:</b>					<b>8,872</b>	
EMPLOYEE COUNT: 38 (CONFIRM EMPLOYEE COUNT IN FORENSICS)						
<b>COMMENTS</b>						
a - Additional 432 s.f. needed for (27) 8'x8' workstations						
b - Additional 112 s.f. needed for (7) 8'x8' workstations						



NOT TO SCALE



FIG A-6 | PROGRAM DIAGRAM - EXISTING SPACE  
BASEMENT



# Appendix D – Project Cost Estimate

The probable cost estimate establishes a current price for the needs as defined in the spreadsheets in Appendix A.

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# **CITY OF TEMPE POLICE DEPT. HQ, SUBSTATION & EQUINE FACILITY**

**OPINION OF PROBABLE PROJECT COST (EXCL. LAND ACQUISITION)**

**NOVEMBER 21st 2019**

# City of Tempe Police Dept. HQ, Substation & Equine Facility

## Opinion of Probable Project Cost (Excl. Land Acquisition)

### Project Details

#### Description

##### ***Basis of Estimate***

This estimate has been prepared at the request of Arrington Watkins Architects and is to provide a Feasibility Study Phase estimate of probable construction and project cost (excluding land acquisition) for the City of Tempe Police Department Headquarters, Police Substation and Equine Facility projects located in Tempe, Arizona.

The estimate is based upon measured quantities and built-up rates prepared from the Feasibility Study Phase documentation provided to RLB in October & November 2019, prepared by Arrington Watkins Architects.

Where information was insufficient, assumptions and allowances were made based wherever possible on discussions with the Architect and/or Engineers.

It is assumed that the project will be competitively bid by four (4) to six (6) general contractors and that the awarded General Contractor and all Subcontractors will be required to pay market wage rates.

Unit pricing is based on November 2019 costs. Construction and project cost escalation has been excluded. **RLB recommends including up to 3.5% per annum to the proposed start of construction for each project.**

A design and estimating contingency (allowance) has been included at 20%.

Project related soft costs have been included at 40% of the estimated total construction cost(s).

##### ***Items Specifically Excluded***

- . Hazardous materials abatement (if any)
- . Costs associated with phasing the construction work
- . Costs associated with out-of-normal working hours
- . Photovoltaics and other renewable energy resources
- . Murals and works of art
- . Work outside the site boundaries unless noted otherwise
- . Land acquisition and related legal costs
- . Items marked as "Excl." in the estimate
- . Construction and project cost escalation (refer to note above)
- . Building #2 exterior and/or interior renovation(s)

# City of Tempe Police Dept. HQ, Substation & Equine Facility

## Opinion of Probable Project Cost (Excl. Land Acquisition)

Estimate Summary (Gross Project Costs)

GFA: Gross Floor Area  
Rates Current At November 2019

Location	GFA SF	Cost/SF	Total Cost
<b>HQ RENOVATION TO EXISTING HEADQUARTERS</b>			
HQRENO RENOVATION TO EXISTING SPACES			
HQRENO1 Building 1 Interior Renovation	11,723	210.84	2,471,693
HQRENO2 Building 2 Interior Renovation (Excluded, NIC)			
HQRENOL New Lobby including Addition of Separate Entrance	1,500	527.10	790,656
<i>HQRENO - RENOVATION TO EXISTING SPACES</i>	<i>13,223</i>	<i>\$246.72</i>	<i>\$3,262,349</i>
HQRELO RELOCATION (ALLOWANCE FOR MODEST TI)	13,223	105.42	1,393,980
<b><i>HQ - RENOVATION TO EXISTING HEADQUARTERS</i></b>	<b><i>26,446</i></b>	<b><i>\$176.07</i></b>	<b><i>\$4,656,329</i></b>
<b>SUB SUBSTATION (NEW BUILD)</b>	<b>44,215</b>	<b>527.10</b>	<b>23,305,884</b>
<b>EQU EQUINE FACILITY (NEW BUILD)</b>			
EQUBLD BUILDING	17,230	95.14	1,639,292
EQUISW SITEWORK			2,681,766
<b><i>EQU - EQUINE FACILITY (NEW BUILD)</i></b>	<b><i>17,230</i></b>	<b><i>\$250.79</i></b>	<b><i>\$4,321,058</i></b>
<b>ESTIMATED TTL COST</b>	<b>87,891</b>	<b>\$367.31</b>	<b>\$32,283,271</b>

# City of Tempe Police Dept. HQ, Substation & Equine Facility

## Opinion of Probable Project Cost (Excl. Land Acquisition)

Estimate Summary - HQ Renovation

GFA: Gross Floor Area  
Rates Current At November 2019

Location	GFA SF	Cost/SF	Total Cost
<b>HQ RENOVATION TO EXISTING HEADQUARTERS</b>			
HQRENO RENOVATION TO EXISTING SPACES			
HQRENO1 Building 1 Interior Renovation	11,723	100.00	1,172,300
HQRENO2 Building 2 Interior Renovation (Excluded, NIC)			
HQRENOL New Lobby including Addition of Separate Entrance	1,500	250.00	375,000
<i>HQRENO - RENOVATION TO EXISTING SPACES</i>	<i>13,223</i>	<i>\$117.02</i>	<i>\$1,547,300</i>
HQRELO RELOCATION (ALLOWANCE FOR MODEST TI)	13,223	50.00	661,150
<b><i>HQ - RENOVATION TO EXISTING HEADQUARTERS</i></b>	<b><i>26,446</i></b>	<b><i>\$83.51</i></b>	<b><i>\$2,208,450</i></b>
<b>ESTIMATED NET COST</b>	<b>26,446</b>	<b>\$83.51</b>	<b>\$2,208,450</b>
<b>MARGINS &amp; ADJUSTMENTS</b>			
Design & Estimating Contingency (Allowance)	20.0 %		\$441,690
Subcontractor Default Insurance (SDI)	1.2 %		\$31,802
<b>ESTIMATED DIRECT (TRADE) CONSTRUCTION COST</b>	<b>26,446</b>	<b>\$101.41</b>	<b>\$2,681,942</b>
General Conditions including General & Temporary Requirements	10.0 %		\$268,194
Performance & Payment Bonds, General Liability Insurance (GLI) & Builders Risk Insurance	2.0 %		\$59,003
General Contractor's Overhead & Profit (Fee)	5.0 %		\$150,457
Applicable State Sales & Use Tax (65% 8.10%)	5.3 %		\$166,353
<b>ESTIMATED CONSTRUCTION COST (CURRENT DOLLARS)</b>	<b>26,446</b>	<b>\$125.76</b>	<b>\$3,325,949</b>
Project Related Soft Costs (Allowance)	40.0 %		\$1,330,380
Land Acquisition Costs (Excluded)			Excl.
<b>ESTIMATED PROJECT COST (CURRENT DOLLARS)</b>	<b>26,446</b>	<b>\$176.07</b>	<b>\$4,656,329</b>
Construction & Project Cost Escalation (Excluded, Refer to Project Details)			Excl.
<b>ESTIMATED TOTAL COST</b>	<b>26,446</b>	<b>\$176.07</b>	<b>\$4,656,329</b>



## Estimate Detail - HQ Renovation

## HQRENO RENOVATION TO EXISTING SPACES

GFA: 1,500 SF    Cost/SF: \$250.00

Rates Current At November 2019

Description		Unit	Qty	Rate	Total
<b>F1020 Integrated Construction</b>					
5	HQ Renovation - new interior lobby including addition of separate entrance	SF	1,500	250.00	375,000
<b>Integrated Construction</b>				<b>\$250.00/SF</b>	<b>\$375,000</b>
<b>NEW LOBBY INCLUDING ADDITION OF SEPARATE ENTRANCE</b>				<b>\$250.00/SF</b>	<b>\$375,000</b>

## Estimate Detail - HQ Renovation

GFA: 13,223 SF    Cost/SF: \$50.00

Rates Current At November 2019

Description		Unit	Qty	Rate	Total
<b>F1020 Integrated Construction</b>					
4	HQ Renovation - Relocation (Allowance for Modest Tenant Improvement)	SF	13,223	50.00	661,150
<b>Integrated Construction</b>				<b>\$50.00/SF</b>	<b>\$661,150</b>
<b>RELOCATION (ALLOWANCE FOR MODEST TI)</b>				<b>\$50.00/SF</b>	<b>\$661,150</b>

# City of Tempe Police Dept. HQ, Substation & Equine Facility

## Opinion of Probable Project Cost (Excl. Land Acquisition)

Estimate Summary - Substation

GFA: Gross Floor Area  
Rates Current At November 2019

Location		GFA SF	Cost/SF	Total Cost
<b>SUB SUBSTATION (NEW BUILD)</b>		<b>44,215</b>	<b>250.00</b>	<b>11,053,750</b>
	<b>ESTIMATED NET COST</b>	<b>44,215</b>	<b>\$250.00</b>	<b>\$11,053,750</b>
<b>MARGINS &amp; ADJUSTMENTS</b>				
Design & Estimating Contingency (Allowance)	20.0 %			\$2,210,750
Subcontractor Default Insurance (SDI)	1.2 %			\$159,174
<b>ESTIMATED DIRECT (TRADE) CONSTRUCTION COST</b>		<b>44,215</b>	<b>\$303.60</b>	<b>\$13,423,674</b>
General Conditions including General & Temporary Requirements	10.0 %			\$1,342,367
Performance & Payment Bonds, General Liability Insurance (GLI) & Builders Risk Insurance	2.0 %			\$295,321
General Contractor's Overhead & Profit (Fee)	5.0 %			\$753,069
Applicable State Sales & Use Tax (65% 8.10%)	5.3 %			\$832,629
<b>ESTIMATED CONSTRUCTION COST (CURRENT DOLLARS)</b>		<b>44,215</b>	<b>\$376.50</b>	<b>\$16,647,060</b>
Project Related Soft Costs (Allowance)	40.0 %			\$6,658,824
Land Acquisition Costs (Excluded)				Excl.
<b>ESTIMATED PROJECT COST (CURRENT DOLLARS)</b>		<b>44,215</b>	<b>\$527.10</b>	<b>\$23,305,884</b>
Construction & Project Cost Escalation (Excluded, Refer to Project Details)				Excl.
<b>ESTIMATED TOTAL COST</b>		<b>44,215</b>	<b>\$527.10</b>	<b>\$23,305,884</b>

### Opinion of Probable Project Cost (Excl. Land Acquisition)

GFA: 44,215 SF    Cost/SF: \$250.00

### SUB SUBSTATION (NEW BUILD)

Description		Unit	Qty	Rate	Total
<b>F1020 Integrated Construction</b>					
6	Police Substation	SF	44,215	250.00	11,053,750
<b>Integrated Construction</b>				<b>\$250.00/SF</b>	<b>\$11,053,750</b>
<b>SUBSTATION (NEW BUILD)</b>				<b>\$250.00/SF</b>	<b>\$11,053,750</b>

# City of Tempe Police Dept. HQ, Substation & Equine Facility

## Opinion of Probable Project Cost (Excl. Land Acquisition)

Estimate Summary - Equine Facility

GFA: Gross Floor Area  
Rates Current At November 2019

Location	GFA SF	Cost/SF	Total Cost
<b>EQU EQUINE FACILITY (NEW BUILD)</b>			
EQUBLD Building	17,230	45.12	777,500
EQU SW Sitework			1,271,935
<b>EQU - EQUINE FACILITY (NEW BUILD)</b>	<b>17,230</b>	<b>\$118.95</b>	<b>\$2,049,435</b>
<b>ESTIMATED NET COST</b>	<b>17,230</b>	<b>\$118.95</b>	<b>\$2,049,435</b>
<b>MARGINS &amp; ADJUSTMENTS</b>			
Design & Estimating Contingency (Allowance)	20.0 %		\$409,887
Subcontractor Default Insurance (SDI)	1.2 %		\$29,512
<b>ESTIMATED DIRECT (TRADE) CONSTRUCTION COST</b>	<b>17,230</b>	<b>\$144.45</b>	<b>\$2,488,834</b>
General Conditions including General & Temporary Requirements	10.0 %		\$248,884
Performance & Payment Bonds, General Liability Insurance (GLI) & Builders Risk Insurance	2.0 %		\$54,754
General Contractor's Overhead & Profit (Fee)	5.0 %		\$139,623
Applicable State Sales & Use Tax (65% 8.10%)	5.3 %		\$154,375
<b>ESTIMATED CONSTRUCTION COST (CURRENT DOLLARS)</b>	<b>17,230</b>	<b>\$179.13</b>	<b>\$3,086,470</b>
Project Related Soft Costs (Allowance)	40.0 %		\$1,234,588
Land Acquisition Costs (Excluded)			Excl.
<b>ESTIMATED PROJECT COST (CURRENT DOLLARS)</b>	<b>17,230</b>	<b>\$250.79</b>	<b>\$4,321,058</b>
Construction & Project Cost Escalation (Excluded, Refer to Project Details)			Excl.
<b>ESTIMATED TOTAL COST</b>	<b>17,230</b>	<b>\$250.79</b>	<b>\$4,321,058</b>

### Opinion of Probable Project Cost (Excl. Land Acquisition)

### Rates Current At November 2019

Description		Unit	Qty	Rate	Total
<b>F1020 Integrated Construction</b>					
1	Equine Facility - Office	SF	1,225	150.00	183,750
2	Equine Facility - Support	SF	919	150.00	137,850
3	Equine Facility - Horse Area incl. Inner & Outer Stalls	SF	14,736	25.00	368,400
12	Equine Facility - Dog Area	SF	350	250.00	87,500
<b>Integrated Construction</b>				<b>\$45.12/SF</b>	<b>\$777,500</b>
<b>BUILDING</b>				<b>\$45.12/SF</b>	<b>\$777,500</b>

### Opinion of Probable Project Cost (Excl. Land Acquisition)

## EQU EQUINE FACILITY (NEW BUILD)

### Rates Current At November 2019

Description		Unit	Qty	Rate	Total
<b>G2040 Site Development</b>					
7	Equine Facility - Arena (100' x 200')	SF	20,000	35.00	700,000
13	Equine Facility - Site Development (1.73-Acres)	SF	38,129	15.00	571,935
<b>Site Development</b>					<b>\$1,271,935</b>
<b>SITEWORK</b>					<b>\$1,271,935</b>

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# Appendix E – Project Cost Estimate Escalation Summary

The escalation summary provides a yearly escalation of the project costs based on 6 years of construction start time.

**City of Tempe Police Department HQ, Substation & Equine Facility**  
**Opinion of Probable Project Costs (Excluding Land Acquisition)**

Scope of Work	Current Estimated Cost (November 2019 \$\$\$)	Construction & Project Cost Escalation (Allowance, 3.5% Per Annum)						
		2020	2021	2022	2023	2024	2025	2026
<b>HQ - Renovation to Existing Spaces</b>								
Building 1 Interior Renovation	\$ 2,471,693	\$ 2,558,202	\$ 2,647,739	\$ 2,740,410	\$ 2,836,325	\$ 2,935,596	\$ 3,038,342	\$ 3,144,684
New Lobby including Addition of Separate Entrance	\$ 790,656	\$ 818,329	\$ 846,970	\$ 876,614	\$ 907,296	\$ 939,051	\$ 971,918	\$ 1,005,935
Relocation (Allowance for Modest TI)	\$ 1,393,980	\$ 1,442,769	\$ 1,493,266	\$ 1,545,531	\$ 1,599,624	\$ 1,655,611	\$ 1,713,557	\$ 1,773,532
<b>Substation</b>	\$ 23,305,884	\$ 24,121,590	\$ 24,965,846	\$ 25,839,650	\$ 26,744,038	\$ 27,680,079	\$ 28,648,882	\$ 29,651,593
<b>Equine Facility</b>	\$ 4,321,058	\$ 4,472,295	\$ 4,628,825	\$ 4,790,834	\$ 4,958,513	\$ 5,132,061	\$ 5,311,684	\$ 5,497,592
<b>Total</b>	<b>\$ 32,283,271</b>							

**ROUNDED-COSTS**

Scope of Work	Current Estimated Cost (November 2019 \$\$\$)	Construction & Project Cost Escalation (Allowance, 3.5% Per Annum)						
		2020	2021	2022	2023	2024	2025	2026
<b>HQ - Renovation to Existing Spaces</b>								
Building 1 Interior Renovation	\$ 2,472,000	\$ 2,559,000	\$ 2,649,000	\$ 2,742,000	\$ 2,838,000	\$ 2,937,000	\$ 3,040,000	\$ 3,146,000
New Lobby including Addition of Separate Entrance	\$ 791,000	\$ 819,000	\$ 848,000	\$ 878,000	\$ 909,000	\$ 941,000	\$ 974,000	\$ 1,008,000
Relocation (Allowance for Modest TI)	\$ 1,394,000	\$ 1,443,000	\$ 1,494,000	\$ 1,546,000	\$ 1,600,000	\$ 1,656,000	\$ 1,714,000	\$ 1,774,000
<b>Substation</b>	\$ 23,306,000	\$ 24,122,000	\$ 24,966,000	\$ 25,840,000	\$ 26,744,000	\$ 27,680,000	\$ 28,649,000	\$ 29,652,000
<b>Equine Facility</b>	\$ 4,321,000	\$ 4,472,000	\$ 4,629,000	\$ 4,791,000	\$ 4,959,000	\$ 5,133,000	\$ 5,313,000	\$ 5,499,000
<b>Total</b>	<b>\$ 32,284,000</b>							